

**REMARKS UNDER 37 CFR § 1.111**

**Formal Matters**

Claims 14-15 and 18-37 are pending after entry of the amendments set forth herein.

Claims 14-15 and 18-37 were examined. Claims 14-15 and 18-37 were rejected.

Applicants respectfully request reconsideration of the application in view of the amendments and remarks made herein.

No new matter has been added.

**The Office Action**

**Claims Rejected Under 35 U.S.C. Section 102(b) – (Chaux)**

In the Official Action of June 16, 2006, claims 14, 15, and 19-37 were rejected under 35 U.S.C. Section 102(b) as being anticipated by Chaux, U.S. Patent No. 4,852,552. The Examiner asserted that Chaux discloses a device comprising a first arm, second arm, a mechanism comprising a rack bar (8) between arms and crank (16). The Examiner further asserted that Chaux discloses in Fig. 6, that the arm 28 moves away and vertically with respect to the arm 34.

Applicants respectfully traverse this ground of rejection. Applicants note that for a rejection under 35 U.S.C. Section 102(e) to be proper, the reference applied in the rejection must disclose (or inherently possess) each and every feature recited in each of the rejected claims. It is respectfully submitted that Chaux clearly fails to disclose or inherently possess each and every feature of every claim rejected under this ground of rejection.

With regard to claim 14, it is respectfully submitted that Chaux does not disclose a mechanism that operates to drive arm members away from each other and also drives movement of one of the arm members and one of the rib engaging blades in an upward direction. The method of Chaux shown in Fig. 6, that was referred to by the Examiner requires the surgeon to tilt the retractor so that the movable arm is slight raised, see column 4, lines 54-56. The mechanism of Chaux only moves the arms in one relative, translational direction with respect to each other. The lifting of the arm is performed by the surgeon, not a mechanism. To further clarify this distinction, claim 14 has been amended above to

further recite a housing, wherein at least a portion of the mechanism is contained in the housing, and wherein the mechanism drives the arm members away from each other in a transverse direction substantially parallel to the housing, and also drives movement of one of the arm members and engaging blades in an upward direction, different from the transverse direction, with respect to the housing. It is respectfully submitted that the arm 28 of Chaux moves only translationally with respect to rack bar 8, no matter what orientation the device is placed in, and does not move upwardly with respect to the bar, as the bar 8 is positioned by the surgeon along with the arm 28 and the arm simply moves unidirectionally along the bar.

With regard to claim 19, it is respectfully submitted that the arms 28 and 34 of Chaux are not rotatable with respect to the rack bar 8. Further, even the portions of arms 28 and 34 are not rotatable with respect to the other portions 26 and 32, respectively, during use, as Chaux indicates at column 3, lines 32-33 that these parts are normally locked against rotation. Accordingly, it is respectfully submitted that the arms of Chaux are clearly not rotatable with respect to the rack bar 8. To still further clarify the distinction of claim 19 over Chaux, claim 19 has been amended above to recite that the arm member is rotatable during use.

With regard to claim 20, it is respectfully submitted that Chaux drives the arm members apart in a single, translational direction. Claim 20 has been amended above to recite that the vertical driving direction is different from the direction in which the second arm member is driven away from the first arm member. It is respectfully submitted that Chaux et al. clearly fails to disclose driving in two directions, such as claimed.

Claim 21 depends from claim 20 and additionally recites a support arm adapted to rest against the surface of a body of a patient during driving by the mechanism. The Examiner has not identified where she interprets Chaux to disclose such a support arm. It is respectfully submitted that Chaux fails to disclose or suggest a support arm as claimed.

Claim 22 recites that the support arm of claim 21 rotates with the second arm with respect to the base portion during driving by the mechanism. As noted above, Applicants respectfully submit that the arms of Chaux do not rotate with respect to the rack bar during driving. Further Chaux fails to disclose a support arm of any sort, let alone a support arm that rotates with a second arm during driving.

With regard to claim 23, it is respectfully submitted that Chaux clearly fails to disclose or suggest a support arm that ratchets with respect to one of the spreader arms of Chaux. If the Examiner disagrees, the Examiner is respectfully requested to specifically identify where in Chaux that it is interpreted to disclose a ratcheting support arm as claimed.

With regard to claim 24, it is respectfully submitted that Chaux clearly fails to disclose or suggest a support arm having a sternal pad at a distal end thereof, as claimed. As the Examiner has not identified where in Chaux, there is a disclosure of this, the Examiner is respectfully requested to specifically identify where in Chaux that it is interpreted to disclose a support arm with sternal pad as claimed.

Claim 25 has been amended to further clarify that the adjustment of the relative distance between the arms is by movement along a direction different from a direction of the driving to adjust the relative height. It is respectfully submitted that the device of Chaux drives the arm in only one direction. Accordingly, it is respectfully submitted that claim 25 patentable defines over the Chaux reference.

With regard to claim 26, it is respectfully submitted that the second arm of Chaux is not rotatably and translationally movable with respect to the frame during driving, for reasons already stated above in the remarks with regard to claim 19.

With regard to claim 27, since the arm of Chaux does not rotate, the blade cannot rotate with it.

With regard to claim 28, it is respectfully submitted that Chaux fails to disclose a support arm, as already discussed above.

With regard to claim 29, Chaux fails to disclose a support arm as claimed, in combination with first and second arm members and a drive mechanism, whereby the support arm contacts an external chest wall of the patient and transfers lifting force to the second arm during actuation of the drive mechanism.

With regard to claim 30, it is respectfully submitted that Chaux fails to disclose, and the Examiner has not identified where Chaux is interpreted to disclose, an offset positioning assembly that allows a support arm to rotate with respect to the second arm in one direction and is prevented from rotating in an opposite direction. As noted above, it is respectfully submitted that Chaux fails to disclose a support arm whatsoever. If the Examiner disagrees, the Examiner is respectfully requested to specifically identify where Chaux is interpreted to disclose the offset positioning assembly and support arm as claimed.

Claim 31 depends from claim 30 and, it is respectfully submitted, is therefore allowable for at least the same reasons provided with regard to claims 29 and 30 above. Further, it is respectfully submitted that Chaux fails to disclose or suggest a support arm and an offset positioning assembly comprising a pawl mounted in one of the second arm and the support arm, and a ratchet mounted in the other. If the Examiner disagrees, the Examiner is respectfully requested to specifically identify where Chaux is interpreted to disclose these features.

With regard to claim 32, it is respectfully submitted that Chaux fails to disclose a first blade arm that extends outwardly and downwardly from a base portion that extends substantially horizontally. It is respectfully submitted that the arms of Chaux are substantially straight, as shown in Fig. 1 and described at column 3, lines 65-68. Further, it is respectfully submitted that Chaux fails to disclose a second arm that is rotatably and translationally mounted with respect to the base portion and which extends downwardly therefrom. As already noted above, the arms of Chaux are not rotatable with respect to the rack 8. Further, the arms of Chaux extend out substantially horizontally and parallel to the rack 8 in a substantially straight manner, so that the retractor can lie as near as possible to the patient's chest during surgery, see column 3, lines 61-68. Further, Chaux fails to disclose a support arm as claimed, for reasons already discussed above.

As to claim 33, it is respectfully submitted that Chaux clearly fails to disclose a support arm that is adjustable for contact with an external surface of a patient's body, or first adjusting means associated with the frame structure and second adjusting means arranged to allow adjustment of the support arm prior to spreading. If the Examiner disagrees, the Examiner is respectfully requested to specifically identify where Chaux is interpreted to disclose a support arm and adjusting means as claimed, since these have not been identified heretofore.

With regard to claim 34, it is respectfully submitted that Chaux clearly fails to disclose a support arm having a sternal pad at a distal end thereof, for reasons already noted above in the remarks made with regard to claim 24.

With regard to claim 35, it is respectfully submitted that Chaux clearly fails to disclose a first arm that is rotatable and translationally movable with respect to a frame, wherein driving of the first arm by the adjusting means causes increase in the relative distance between the first and second arms, and also rotation of the first arm with respect to the frame. If the Examiner disagrees, the Examiner is respectfully requested to specifically identify where Chaux is interpreted to disclose these features, since these have not been identified heretofore.

With regard to claim 36, it is respectfully submitted that Chaux discloses neither a second arm movably and rotatably mounted with respect to a base portion, nor a support arm rotatably mounted with respect to the base portion and adapted to rest against the surface of a body of a patient during driving by a drive mechanism. If the Examiner disagrees, the Examiner is respectfully requested to specifically identify where Chaux is interpreted to disclose these features, since these have not been identified heretofore.

Claim 37 recites, *inter alia*, that the driving of the second arm by the adjusting means increases the relative distance between the first and second arms and also rotates the second arm with respect to the frame. It is respectfully submitted that the arms of Chaux clearly do not rotate with respect to the rack bar 8 during spreading. Accordingly, it is respectfully submitted that claim 37 clearly patentably defines over Chaux. If the Examiner disagrees, the Examiner is respectfully requested to specifically identify where Chaux is interpreted to disclose these features, since these have not been identified heretofore.

In view of the above amendments and remarks, the Examiner is respectfully requested to reconsider and withdraw the rejection of claims 14, 15, and 19-37 under 35 U.S.C. Section 102(b) as being anticipated by Chaux, U.S. Patent No. 4,852,552, as being clearly inappropriate.

**Claims Rejected Under 35 U.S.C. Section 103(a) (Chaux in view of Coker)**

Claim 18 was rejected under 35 U.S.C. Section 103(a) as being unpatentable over Chaux, U.S. Patent No. 4,852,552 in view of Coker, U.S. Patent No. 5,363,841. Coker was applied as teaching the use of a retractor having blades with fingers.

Coker does nothing to make up for the deficiencies of Chaux in meeting all of the limitations of claim 14. Accordingly, since claim 18 depends from claim 14, it is respectfully submitted that claim 18 is allowable over Chaux and Coker for at least the same reasons that claim 14 is allowable over Chaux, as described above.

Accordingly, for at least the above reasons, the Examiner is respectfully requested to reconsider and withdraw the rejection of claim 18 under 35 U.S.C. Section 103(a) as being unpatentable over Chaux, U.S. Patent No. 4,852,552 in view of Coker, U.S. Patent No. 5,363,841, as being clearly inappropriate.

**Claims Rejected Under the Judicially Created Doctrine of Obviousness-Type Double Patenting (U.S. Patent No. 6,746,467)**

Claims 14, 15 and 18-37 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,746,467. Although the Examiner admitted that the claims of U.S. Patent No. 6,746,467 are not identical with the currently

pending claims, the Examiner asserted that the claims are not patentably distinct from one another because the claims of the instant application are anticipated by the claimed invention of the patent.

Applicants respectfully traverse. It is respectfully submitted that the claims of U.S. Patent No. 6,746,467 clearly do not anticipate the claims of the present application. As noted above, in order for an anticipation to be proper, the reference applied in the rejection must disclose (or inherently possess) each and every feature recited in each of the rejected claims. It is respectfully submitted that U.S. Patent No. 6,746,467 clearly fails to disclose or inherently possess each and every feature of every claim rejected under this ground of rejection. As just one example, none of the claims of U.S. Patent No. 6,746,467 recites a mechanism interposed between first and second arm members, at least a portion of the mechanism contained in a housing, the mechanism arranged to drive the arm members toward and away from one another in a transverse direction, and to drive one of the arm members in an upward direction.

Nevertheless, in an effort to advance the prosecution of the instant application, and without acquiescing to this ground of rejection for at least the reasons provided above, Applicants are submitting herewith a terminal disclaimer to obviate this ground of rejection.

In view of the above remarks and the submission of the terminal disclaimer concurrently herewith, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claims 14, 15 and 18-37 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,746,467, as being moot.

**Claims Rejected Under the Judicially Created Doctrine of Obviousness-Type Double Patenting**  
**(U.S. Patent No. 6,602,189)**

Claims 14, 15 and 18-37 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-39 of U.S. Patent No. 6,602,189. Although the Examiner admitted that the claims of U.S. Patent No. 6,746,467 are not identical with the currently pending claims, the Examiner asserted that the claims are not patentably distinct from one another because the claims of the instant application are anticipated by the claimed invention of the patent.

Applicants respectfully traverse. It is respectfully submitted that the claims of U.S. Patent No. 6,602,189 clearly do not anticipate the claims of the present application. As noted above, in order for an anticipation to be proper, the reference applied in the rejection must disclose (or inherently possess) each and every feature recited in each of the rejected claims. It is respectfully submitted that U.S. Patent No. 6,602,189 clearly fails to disclose or inherently possess each and every feature of every claim rejected

under this ground of rejection. It is noted that claims 1-39 of U.S. Patent 6,602,189 are method claims and that the claims of the instant application are device claims. Accordingly, it is respectfully submitted that the claims of U.S. Patent No. 6,602,189 clearly do not anticipate the present claims.

Nevertheless, in an effort to advance the prosecution of the instant application, and without acquiescing to this ground of rejection for at least the reasons provided above, Applicants are submitting herewith a terminal disclaimer to obviate this ground of rejection.

In view of the above remarks and the submission of the terminal disclaimer concurrently herewith, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claims 14, 15 and 18-37 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-39 of U.S. Patent No. 6,602,189, as being moot.

**Claims Rejected Under the Judicially Created Doctrine of Obviousness-Type Double Patenting**  
**(U.S. Patent No. 5,944,736)**

Claims 14, 15 and 18-37 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-87 of U.S. Patent No. 5,944,736. Although the Examiner admitted that the claims of U.S. Patent No. 5,944,736 are not identical with the currently pending claims, the Examiner asserted that the claims are not patentably distinct from one another because the claims of the instant application are anticipated by the claimed invention of the patent.

Applicants respectfully traverse. It is respectfully submitted that the claims of U.S. Patent No. 5,944,736 clearly do not anticipate the claims of the present application. As noted above, in order for an anticipation to be proper, the reference applied in the rejection must disclose (or inherently possess) each and every feature recited in each of the rejected claims. It is respectfully submitted that the claims of U.S. Patent No. 5,944,736 do not disclose or inherently possess each and every feature of every claim rejected under this ground of rejection.

Nevertheless, in an effort to advance the prosecution of the instant application, and without acquiescing to this ground of rejection for at least the reasons provided above, Applicants are submitting herewith a terminal disclaimer to obviate this ground of rejection.

In view of the above remarks and the submission of the terminal disclaimer concurrently herewith, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claims 14, 15 and 18-37 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-87 of U.S. Patent No. 5,944,736, as being moot.

**Claims Rejected Under the Judicially Created Doctrine of Obviousness-Type Double Patenting**  
**(U.S. Patent No. 5,976,171)**

Claims 14, 15 and 18-37 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 5,976,171. Although the Examiner admitted that the claims of U.S. Patent No. 5,976,171 are not identical with the currently pending claims, the Examiner asserted that the claims are not patentably distinct from one another because the claims of the instant application are anticipated by the claimed invention of the patent.

Applicants respectfully traverse. It is respectfully submitted that the claims of U.S. Patent No. 5,976,171 clearly do not anticipate the claims of the present application. As noted above, in order for an anticipation to be proper, the reference applied in the rejection must disclose (or inherently possess) each and every feature recited in each of the rejected claims. It is respectfully submitted that the claims of U.S. Patent No. 5,976,171 do not disclose or inherently possess each and every feature of every claim rejected under this ground of rejection. As just one example, it is noted that claims 1-12 of U.S. Patent No. 5,976,171 do not disclose a support arm having a sternal pad at a distal end thereof as recited in claim 24 of the present claims.

Nevertheless, in an effort to advance the prosecution of the instant application, and without acquiescing to this ground of rejection for at least the reasons provided above, Applicants are submitting herewith a terminal disclaimer to obviate this ground of rejection.

In view of the above remarks and the submission of the terminal disclaimer concurrently herewith, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claims 14, 15 and 18-37 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-12 of U.S. Patent No. 5,976,171, as being moot.

**Claims Rejected Under the Judicially Created Doctrine of Obviousness-Type Double Patenting**  
**(U.S. Patent No. 5,730,757)**

Claims 14, 15 and 18-37 were rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-45 of U.S. Patent No. 5,730,757. Although the Examiner admitted that the claims of U.S. Patent No. 5,730,757 are not identical with the currently pending claims, the Examiner asserted that the claims are not patentably distinct from one another because the claims of the instant application are anticipated by the claimed invention of the patent.



Applicants respectfully traverse. It is respectfully submitted that the claims of U.S. Patent No. 5,730,757 clearly do not anticipate the claims of the present application. As noted above, in order for an anticipation to be proper, the reference applied in the rejection must disclose (or inherently possess) each and every feature recited in each of the rejected claims. It is respectfully submitted that the claims of U.S. Patent No. 5,730,757 do not disclose or inherently possess each and every feature of every claim rejected under this ground of rejection

Nevertheless, in an effort to advance the prosecution of the instant application, and without acquiescing to this ground of rejection for at least the reasons provided above, Applicants are submitting herewith a terminal disclaimer to obviate this ground of rejection.

In view of the above remarks and the submission of the terminal disclaimer concurrently herewith, Applicants respectfully request the Examiner to reconsider and withdraw the rejection of claims 14, 15 and 18-37 under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-45 of U.S. Patent No. 5,730,757, as being moot.

### Conclusion

Applicants submit that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone the undersigned at the number provided.

The Commissioner is hereby authorized to charge any underpayment of fees associated with this communication, including any necessary fees for extensions of time, or credit any overpayment to Deposit Account No. 50-2653, order number GUID-006CON6.

Respectfully submitted,  
LAW OFFICE OF ALAN W. CANNON

Date: \_\_\_\_\_

9/18/06

By: \_\_\_\_\_



Alan W. Cannon  
Registration No. 34,977

LAW OFFICE OF ALAN W. CANNON  
834 South Wolfe Road  
Sunnyvale, CA 94086  
Telephone: (408) 736-3554  
Facsimile: (408) 736-3564